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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,253	02/09/2007	Seung-Myun Baek	7950.048.00	5025

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McKenna Long & Aldridge
1900 K Street N W
Washington, DC 20006

EXAMINER

LEE, DOUGLAS S

ART UNIT	PAPER NUMBER
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2121

MAIL DATE	DELIVERY MODE
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11/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/560,253	Applicant(s) BAEK ET AL.	
	Examiner DOUGLAS S. LEE	Art Unit 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/12/2005, 4/14/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al.

(A New Control Protocol For Home Appliances -LnCP -2001) in view of Putterman et al.

(US 2004/0088731 and in view of the background of Kim (US 7,062,531).

Regarding claims 1, 2, 4,6-13, 15, and 17-22, Lee et al. discloses an electric device

(see p. 287, Figure 1 the Refrigerator) based on a predetermined protocol (see

Abstract, lines 1-9 [the protocol linking all the devices is LnCP]) including at least a

lower layer (see p. 287, Figure 1, the Network Manager [the network manager is part of

the physical layer]) and a upper layer (see Abstract, lines 1-9 [the power line is the data

link layer and is used as a network bus]), wherein the upper layer receives from the

lower layer a message including a command field implying an operation that is to be

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applied by the electric device and an argument field (see p. 287 column 2, lines 29-35 and Figure 7a., Request message [the master device (the network manager) sends via the data link layer (the Power Line Bus) a request message that includes a Command Code Field and an Argument Field to the slave (the refrigerator)]). Lee et al. does not disclose the argument field is according to a version of a protocol applied to the electric device performing the operation. However, Putterman et al. discloses such a feature (see paragraph 0048, lines 7-14 [the protocol is effectuated through the requests and the responses, the RPC packet has an identification field that identifies the request which is the same as the argument field])).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Putterman et al. into the system of Lee et al. The method of Putterman et al. can be implemented by enabling the Network Manager (the master device) to create a request message that has an argument field based on the protocol used.

The references as applied above do not disclose that the other electric device receives the message, extracts the arguments from the argument field and processes the arguments. However, the background of Kim discloses such a feature (see column 2, lines 6-13 [the modem forwards the request message to the selected domestic appliance and extracts the LnCP body of the message and determines whether or not the order or command code is for itself, if it is the domestic appliance performs the operation])).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

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invention was to implement the method as described by the background of Kim into the system of the references as applied above. The method of the background of Kim can be implemented by enabling the refrigerator (or slave device) to extract the body of the LnCP message and process the instructions in the argument field of the body. The motivation for this is to enable the device to execute the request.

Regarding claims 3, 5, 14, and 16, Lee et al. discloses that when the arguments in the argument field are deficient, the other electric device sets the deficient arguments as predetermined values (see Figure 7b. Response Message and p. 290, lines 36-42 [the input arguments from the network manager become deficient after the refrigerator (or slave device) executes the command code and replaces the input arguments with either an ACK or NAK and return arguments]).

Conclusion

1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Douglas Lee, whose telephone number is (571) 272-3745. The examiner can normally be reached on Monday-Friday from 8:00AM- 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Albert Decady*, can be reached on (571) 272-3997 or via e-mail addressed to [*albert.decady@uspto.gov*]. The fax number for this Group is (571) 273-8300. Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [**doug.lee@uspto.gov**].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (in USA or CANADA) or 571-272-1000.

/D. S. L./

Examiner, Art Unit 2121

/Albert DeCady/

Supervisory Patent Examiner, Art Unit 2121